AMENDMENTS TO THE CLAIMS

The claims have been amended as follows:

1. (Currently Amended) An optical recording medium suitable for recording or reproducing information by irradiating a laser beam at a wavelength between 395~425 nm onto a recording surface in the optical recording medium, the laser beam being incident from a side of the optical recording medium through an objective lens having a numerical aperture of 0.62~0.68, the optical recording medium comprising:

at least ~~one substrate~~ first and second substrates,

a reflective film formed between the first and second substrates, and

at least one recording surface, the first and second substrates respectively having a thickness greater than 0.2 mm, wherein a total thickness of the optical recording medium is substantially 1.2 mm and a capacity of said recording medium is greater than 13.8 Gbytes per one recording surface.

2.(Cancelled)

3.(Cancelled)

4. (Currently Amended) The optical medium of claim 1, ~~wherein the optical recording medium comprises a first substrate and a~~ the second substrate is formed over the first substrate, and ~~wherein the second substrate~~ has a pit pattern on a surface thereof facing the first substrate.

5. (Cancelled)

6. (Currently Amended) The optical medium of claim 1~~, wherein the optical recording medium comprises a first substrate~~ further comprising a third substrate, wherein ~~a~~ the second

substrate is formed over a first surface of the first substrate, and ~~a~~ the third substrate is formed over a second surface, which is the opposite surface of the first surface, of the first substrate.

7. (Original) The optical medium of claim 6, wherein the third substrate has a same thickness as the second substrate.

8. (Original) The optical medium of claim 6, wherein the second substrate has a first pit pattern, and the third substrate has a second pit pattern.

9. (Original) The optical medium of claim 6, wherein the first substrate has a first pit pattern on the first surface thereof and a second pit pattern on the second surface thereof.

10. (Currently Amended) The optical medium of claim 6, further comprising: ~~a first reflective film formed between the first and second substrates; and~~ a second reflective film formed between the first and third substrates.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) An optical recording or reproducing method of conducting recording or reproducing of information ~~by irradiating a laser beam at a wavelength between 395~425 nm onto a recording surface in an optical recording medium having at least one substrate and at least one recording surface, the substrate having a thickness greater than 0.2 mm~~, comprising:

irradiating a laser beam at wavelength between 395~425 nm onto an optical recording medium which has at least first and second substrates, a reflective film formed between the first and second substrates and at least one recording surface,

wherein the first and second substrates respectively have a thickness of more than 0.2 mm and a total thickness of the optical recording medium is about 1.2 mm, and a capacity of the optical recording medium is greater than 13.8 Gigabytes per one recording surface, and

wherein the laser beam being incident on the substrate of the optical recording medium using an objective lens having a numerical aperture of 0.62~0.68~~, wherein a total thickness of the optical recording medium is substantially 1.2 mm and a capacity of the optical recording medium is greater than 13.8 Gbytes per one recording surface~~.

14. (Currently Amended) An optical recording or reproducing apparatus for conducting recording or reproducing of information ~~by irradiating a laser beam onto a recording surface in an optical recording medium having at least one substrate and at least one recording surface, and the substrate having a thickness greater than 0.2 mm~~, the apparatus comprising:

at least one laser beam source irradiating the laser beam at a wavelength between 395~425 nm onto an optical recording medium which has at least first and second substrates, a reflective film formed between the first and second substrates and at least one recording surface, wherein the first and second substrates respectively have a thickness of more than 0.2 mm and total thickness of the optical recording medium is about 1.2 mm, and a capacity of the optical recording medium is greater than 13.8 Gigabytes per one recording surface; and

an objective lens for focusing the laser beam onto the optical recording medium, the objective lens having a numerical aperture of 0.62~0.68~~, wherein a total thickness of the optical recording medium is substantially 1.2 mm and a capacity of the optical recording medium is greater than 13.8 Gbytes per one recording surface~~.

15. (Previously Presented) The optical recording or reproducing apparatus as claimed in claim 14, further comprising:

a numerical aperture control device controlling the numerical aperture of the objective lens into 0.35 to 0.40, thereby recording or reproducing a recording medium with a substrate thickness of approximately 0.6 mm.

16. (Previously Presented) The optical recording or reproducing apparatus as claimed in claim 14, wherein the numerical aperture control device controls the numerical aperture of the objective lens into about 0.24, thereby recording or reproducing a recording medium with a substrate thickness of approximately 1.2 mm.

17. (Previously Presented) The optical recording or reproducing apparatus as claimed in claim 14, further comprising:

a numerical aperture control device controlling the numerical aperture of the objective lens into any one of 0.35 to 0.40 and about 0.24, thereby selectively recording or reproducing a recording medium with a substrate thickness of approximately 0.6 mm and a recording medium with a substrate thickness of approximately 1.2 mm.

18. (Previously Presented) An optical recording medium suitable for recording or reproducing information by irradiating a laser beam at a wavelength between 395~425 nm onto at least one recording surface in the optical recording medium, the laser beam being incident via at least one substrate of the optical recording medium by an objective lens having a numerical aperture of 0.62~0.68, the substrate having a thickness greater than 0.2 mm, and the optical recording medium having a capacity being more than 13.8 Gbytes per recording surface, the optical recording medium comprising:

a first substrate;

a second substrate formed over a surface of the first substrate, the second substrate having a pit patter on a surface facing the first substrate; and

a reflective film formed between the first and second substrates.

19. (Previously Presented) An optical recording medium suitable for recording or reproducing information by irradiating a laser beam at a wavelength between 395~425 nm onto at least one recording surface in the optical recording medium, the laser beam being incident via at least one substrate of the optical recording medium by an objective lens having a numerical aperture of 0.62~0.68, the substrate having a thickness greater than 0.2 mm, and the optical

recording medium having a capacity being greater than 13.8 Gbytes per recording surface, the optical recording medium comprising:

a first substrate;

a second substrate formed over a first surface of the first substrate; and

a third substrate formed over a second surface, which is the opposite surface of the first surface, of the first substrate.

20. (Original) The optical medium of claim 19, wherein the third substrate has a same thickness as the second substrate.

21. (Original) The optical medium of claim 19, wherein the second substrate has a first pit pattern, and the third substrate has a second pit pattern.

22. (Original) The optical medium of claim 19, wherein the first substrate has a first pit pattern on the first surface thereof and a second pit pattern on the second surface thereof.

23. (Previously Presented) The optical medium of claim 19 , further comprising: a first reflective film formed between the first and second substrates; and a second reflective film formed between the first and third substrates.

24.(Cancelled)

25. (Original) The optical medium of claim 23, wherein a total thickness of the first substrate, the first reflective film, the second substrate, the second reflective film, and the third substrate substantially equals 1.2 mm.

26. (Currently Amended) An optical recording or reproducing apparatus for conducting recording/reproducing for information ~~by irradiating a laser beam onto at least one recording surface in an optical recording medium having at least one substrate, the substrate having a~~

~~thickness greater than 0.2 mm and the optical recording medium having a capacity being greater than 13.8 Gbytes per one recording surface~~, the apparatus comprising:

at least one laser beam source irradiating the laser beam at a wavelength between 395~425 nm onto an optical recording medium which has at least first and second substrates, a reflective film formed between the first and second substrates and at least one recording surface, wherein the first and second substrates respectively have a thickness of more than 0.2 mm and a capacity of the optical recording medium is greater than 13.8 Gigabytes per one recording surface;

an objective lens focusing the laser beam onto the optical recording medium, the objective lens having a numerical aperture of 0.62~0.68; and

a numerical aperture control device controlling the numerical aperture of the objective lens into 0.35 to 0.40, thereby recording or reproducing a recording medium with a substrate thickness of approximately 0.6 mm.

27. (Previously Presented) The optical recording or reproducing apparatus as claimed in claim 26, wherein the numerical aperture control device controls the numerical aperture of the objective lens into about 0.24, thereby recording or reproducing a recording medium with a substrate thickness of approximately 1.2 mm.

28. (Previously Presented) The optical recording medium as claimed in claim 1, wherein an optical aberration depending on a thickness of the substrate, a tilt margin, the wave length and the numerical aperture is less than 0.07 λ, where the λ is the wave length.

29. (New) An optical recording medium suitable for recording/reproducing information by irradiating a laser beam at a wavelength between 395~425 nm onto an optical recording medium, the laser beam being incident from a side of the optical recording medium through an objective lens having a numerical aperture of 0.62~0.68, the optical recording medium comprising:

at least one substrate having a thickness of more than 0.2 mm; and

at least one recording layer having a capacity of more than 13.8 Gigabytes,

wherein the optical recording medium has a tilt margin same as DVD, and an optical aberration applicable to the optical recording medium is less than 0.07 λ, where the λ is the wave length.

30. (New) The optical recording medium of claim 29, wherein the optical aberration depends on at least one from the thickness of the substrate, the tilt margin, the wavelength and the numerical aperture.

31. (New) A method for recording/reproducing information, comprising:

irradiating a laser beam at wavelength between 395~425 nm by using an objective lens of a numerical aperture of 0.62~0.68 onto an optical recording medium which has at least one substrate and at least one recording layer,

wherein the substrate has a thickness of more than 0.2 mm, and the recording layer has a capacity of more than 13.8 Gigabytes, and

wherein the optical recording medium has a tilt margin same as DVD, and an optical aberration applicable to the optical recording medium is less than 0.07 λ, where the λ is the wavelength.

32. (New) The method of claim 31, wherein the optical aberration depends on at least one from the thickness of the substrate, the tilt margin, the wavelength and the numerical aperture.

33. (New) An apparatus for recording/reproducing information, the apparatus comprising:

at least one laser beam source for irradiating the laser beam at a wavelength between 395~425 nm onto an optical recording medium which has at least one substrate and at least one recording layer, wherein the substrate has a thickness of more than 0.2 mm, and the recording layer has a capacity of more than 13.8 Gigabytes; and

an objective lens for focusing the laser beam onto the optical recording medium, the objective lens having a numerical aperture of 0.62~0.68.

optical aberration applicable to the optical recording medium is less than 0.07 λ, where the λ is the wavelength.

34. (New) The apparatus of claim 33, wherein the optical aberration depends on at least one from the thickness of the substrate, the tilt margin, the wavelength and the numerical aperture.

35. (New) A method for recording/reproducing information on/from an optical recording medium having at least one substrate and one recording layer, comprising: determining a thickness of the substrate in the optical recording layer,

changing a numerical aperture of a objective lens according to the determined thickness; and

irradiating a laser beam at wavelength between 395~425 nm by using an objective lens of the changed numerical aperture onto the optical recording medium,

wherein an optical aberration which depends on at least one from the thickness of the substrate, the tilt margin, the wavelength and the numerical aperture, is less than 0.07 λ, where the λ is the wavelength.

36. (New) The method of claim 35, wherein the numerical aperture of the objective lens is changed into 0.35 to 0.40, if the thickness of the substrate is about 0.6 mm.

37. (New) The method of claim 35, wherein the numerical aperture of the objective lens is changed into about 0.24, if the thickness of the substrate is about 1.2 mm.

38. (New) An apparatus for recording/reproducing information on/from an optical recording medium having at least one substrate and one recording layer, comprising:

a laser beam source irradiating the laser beam at a wavelength 395~425 nm onto an optical recording medium;

an objective lens for focusing the laser beam onto the optical recording medium; and

a numerical aperture control device for controlling the numerical aperture of the objective lens according to a thickness of the substrate,

wherein an optical aberration which depends on at least one from the thickness of the substrate, the tilt margin, the wavelength and the numerical aperture, is less than 0.07 λ, where the λ is the wavelength.

39. (New) The apparatus of claim 38, wherein the numerical aperture control device changes the numerical aperture of the objective lens into 0.35 to 0.40, if the thickness of the substrate is about 0.6 mm.

40. (New) The apparatus of claim 38, wherein the numerical aperture control device changes the numerical aperture of the objective lens into about 0.24, if the thickness of the substrate is about 1.2 mm.